

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



January 7, 2003

Mr. Robert Hren
Roseville Electric
2090 Hilltop Circle
Roseville, CA 95747

Dear Mr. Hren:

DOCKET	
03-AFC-1	
DATE	JAN 07 2004
RECD.	JAN 07 2004

ROSEVILLE ENERGY PARK (03-AFC-1) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission (Energy Commission) staff requests that Roseville Electric supply the information specified in the enclosed data requests.

The subject areas addressed in the enclosed data requests are air quality, biological resources, cultural resources, efficiency, hazardous materials, land use, noise, socioeconomics, soil and water resources, transmission systems engineering, visual resources, visual resources-plume, and waste management. The information requested is necessary to understand the project, assess whether the project would result in significant environmental effects, and to assess project alternatives and mitigation measures.

Written responses to the enclosed data requests are due to the Energy Commission by February 6, 2003, or at a later date agreed upon by the Energy Commission staff and the applicant.

If you are unable to provide the information requested in the data requests or object to providing it, you must contact the committee assigned to the project and the project manager, within 10 days of receiving these requests, stating your reason for delay or objection.

If you have any questions regarding the enclosed data requests, please call me at (916) 651-8835.

Sincerely,

Bob Eller
Project Manager

Enclosure

cc: Agency Distribution List

PROOF OF SERVICE (REVISED 1/15/04) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 1-7-04

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Air Quality

Author: Joseph M. Loyer

BACKGROUND

The Roseville Energy Park power plant project triggers New Source Review, which includes an assessment of applicable Best Available Control Technology (BACT). Staff typically relies on the BACT assessment to determine if a specific mitigating control technology has been considered and is applicable in a specific case, and whether the project complies with LORS. The applicant has not provided a copy of the Best Available Control Technology assessment for review.

DATA REQUEST

1. Please provide a complete copy of the application for an Authority to Construct submitted to the Placer County Air Pollution Control District, which should include a Best Available Control Technology review.

BACKGROUND

Permits to construct and operate a power plant project can be complex. Adding to that complexity is the need for the Energy Commission to develop Conditions of Certification consistent with the Air District rules and that mitigate the project. The applicant has submitted an AFC that includes two possible turbine manufacturers, the General Electric LM6000 and Alstom GTX 100. The emission profiles of these two turbines are significantly different from each other and thus present significantly different permit and mitigation requirements.

DATA REQUEST

2. Please provide the turbine selection, or a date when the turbine selection will be made.
3. The startup emission estimates for the GTX 100 are significantly different from previous filings (e.g., Malburg Generation Station). Please provide the source or basis for the startup emission estimates for the GTX 100 turbines.

BACKGROUND

Emissions of oxides of nitrogen from power plants can be effectively controlled by the use of post-combustion catalysts that rely on ammonia injection. However, some of the ammonia is not completely reacted and escapes into the air as "ammonia slip". The effects of ammonia slip are two fold, nitrogen deposition and secondary PM formation. Nitrogen deposition can have a significant effect on certain biological species in the vicinity of a project. Ambient ammonia is a reactant for the formation of secondary PM10 and PM2.5 from nitric and sulfuric acids. Secondary PM10 and PM2.5 are significant health concerns in the Roseville area, which is non-attainment for PM10 and may be non-attainment for PM2.5. The applicant has proposed an ammonia slip limit of 10 ppm @ 15% O2. However, it appears that an ammonia slip limit of 5 ppm that would halve the emissions is technically feasible for combined cycle power plants (e.g.,

Roseville Energy Park (03-AFC-1) Data Requests

Midway-Sunset Amendment, Tesla, Palomar and all South Coast Air Quality Management District power plant projects).

DATA REQUEST

4. Please provide a cost estimate and performance guarantee from a catalyst manufacturer for both a 10 ppm ammonia slip limit and a 5 ppm ammonia slip limit for both turbine configurations.

BACKGROUND

The California Energy Commission requires construction emission estimates and impact mitigation. The Energy Commission has instituted construction mitigation programs that include the use of modern construction equipment, catalyzing soot filters, ultra-low sulfur diesel fuel, the abatement of fugitive dust and, when necessary, the use of site specific air monitoring. However, in order to implement these procedures, it is necessary to have specific information regarding the construction schedule and the expected construction equipment. Estimates of construction emissions and impacts were provided in the AFC, however, the emission estimates are incomplete.

DATA REQUEST

5. Please provide the basis for the hourly, daily and annual construction emission estimates. This should include the following:
 - a. The type, size and number of each piece of equipment assumed to be used on site (i.e., 4 x 100 Bhp diesel engine backhoes);
 - b. The duration that each piece (or group) of equipment is assumed to be on site (i.e., 22 days);
 - c. The number of hours of assumed operation for each piece (or group) of equipment that is assumed to be on site (i.e., 8 hours/day);
 - d. The individual emission factors (typically in grams/Bhp-hour) assumed for each piece of equipment that is assumed to be on site for all the major pollutants (NO₂, SO₂, CO, VOC and PM₁₀);
 - e. All other necessary information and assumptions to verify the hourly, daily and annual construction emission estimates as provided;
6. Please provide all relevant data concerning the average ozone estimated from 8 am to 4 pm as used in the submitted estimated construction emission impacts ozone-limiting-method.

BACKGROUND

The Roseville Energy Park power plant project triggers New Source Review, which may include the need to surrender valid emission reduction credits. Issues with emission reduction credits often arise when the credits are scarce or controversial in nature. In the case of the Roseville area, both of these conditions are present. There is a scarcity of emission reduction credits (both NO_x and PM₁₀) in the Roseville area. Additionally, the nature of many of the emission reduction credits that may be used have been the

Roseville Energy Park (03-AFC-1)

Data Requests

subject of several specific directions from both the California Air Resources Board and the federal Environmental Protection Agency in order to update the State Implementation Plan. The applicant has not identified sufficient emission reduction credits to offset the project air emissions. The applicant has identified sources for which they will seek the balance of ERCs to fully offset the project air emission impacts. However, portions of these ERCs may be challenged by other reviewing agencies. In order to effectively deal with these issues, staff must have sufficient time and notice of the ERCs being considered.

DATA REQUEST

7. Please provide a complete description of any additional ERCs that have been secured for the project or provide an approximate date by which all ERCs will be identified or procured.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Biological Resources

Author: Stuart Itoga

BACKGROUND

Roseville Electric (RE) indicated the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and U.S. Army Corp of Engineers (USACE) were consulted on the potential impacts to biological resources caused by implementation of the Draft West Roseville Specific Plan (DWRSP). Included in the DWRSP are a proposed transmission line easement, and some other utility easements, that would be associated with the proposed Roseville Energy Park (REP). These easements could be permitted under the DWRSP; however, CEQA requires a description of the environmental setting at the time environmental analysis is commenced.

DATA REQUEST

8. Proceeding on the assumption that the DWRSP build-out will not occur, provide an assessment of the potential impacts to biological resources associated with construction of the project's transmission line. Graphically, and in tabular format, provide information on the number of poles proposed and the potential impact to biological resources associated with each pole. Vernal pool impacts are defined as ground disturbing, construction-related activities within 250 feet of a vernal pool/swale.
9. Provide a copy of the following permits issued for the DWRSP: USFWS Biological Opinion, 2081 and 1603 permits from CDFG, 404 Clean Water Act permit from the USACE, and 401 Certification from the Regional Water Quality Control Board.

BACKGROUND

Sensitive vernal pool species have been documented on or near the proposed REP site. Sensitive species records include dwarf downingia, vernal pool fairy shrimp, tadpole shrimp, western spadefoot, and California linderiella. Seven different pools on the Pleasant Grove Wastewater Treatment Plant (PGWTP) site were populated by fairy shrimp as well as some pools adjacent to the PGWTP site.

RE is attempting to verify presence/absence for vernal pool branchiopods on the proposed site. RE indicated that dry season sampling of vernal pools was conducted during summer 2003, and wet season surveys will also be conducted.

DATA REQUEST

10. Provide a copy of the letter notifying the USFWS that protocol level vernal pool branchiopod surveys were conducted for the proposed REP. Include a copy of the surveyor(s) 10(a)(1)(a) permit for endangered or threatened vernal pool branchiopods.

Roseville Energy Park (03-AFC-1)

Data Requests

11. Provide the analysis for the dry season vernal pool branchiopod surveys and a discussion of the results.
12. Provide results from the wet season surveys scheduled for December 2003. Include a discussion of the protocol level survey that was used. Provide a list of survey personnel, and the dates surveys were conducted. Include the amounts of precipitation recorded on the project site up to the date of branchiopod surveys conducted for the REP. Include the water depth and duration of inundation for wetlands on the proposed site.

BACKGROUND

The USFWS has defined vernal pools and swales as ephemeral wetlands that form in areas of California with Mediterranean climates that have shallow depressions underlain by a substrate of hardpan, clay, or basalt near the surface that restricts the percolation of water. Vernal pools/swales may occur singly, but more typically occur in vernal pool/swale complexes, due to the local hydrology, geology, and topography.

RE described various wetland features on the proposed site and surrounding areas as seasonal wetland pools, seasonal wetland swales, vernal pools, and seasonal wetlands.

DATA REQUEST

13. Provide definitions, in the context of the REP AFC, for: seasonal wetland pool, seasonal wetland swale, vernal pool, and seasonal wetland. For the definitions provided, list the source(s) from which the definitions were derived.
14. Define the substrate (i.e. clay, hardpan) comprising the layer restricting percolation of water at the proposed REP project site. Include a discussion of the extent and distribution of this layer throughout the underlying areas of the proposed project site.
15. Provide color aerial photos, at a scale of 1:2000, or other agreed upon scale, of all on-site wetland features at the proposed project site after 2003 winter/spring inundation. Based on the area of wetland features after inundation, provide the number (in acres) for each wetland feature on the proposed REP site, and a grand total (in acres) for all wetland features on the proposed site.

BACKGROUND

Construction and operation of the proposed REP could potentially impact sensitive plants, animals and habitats. Sensitive species occurrences have been documented on, or near, the proposed project site. These occurrences include: vernal pool fairy shrimp, dwarf downingia, western spadefoot, Swainson's hawk, white-tailed kite, vernal pool tadpole shrimp, burrowing owl, and California linderiella. In addition, creeks in the project area could be habitat for listed anadromous fish species. To construct and operate the proposed REP, RE will need to obtain various permits from agencies outside the Energy Commission. These permits are likely to include but are not limited to: Section 404, Clean Water Act-U.S. Army Corp of Engineers, Biological Opinion-U.S. Fish and Wildlife Service, Biological Opinion-National Marine Fisheries Service, Streambed Alteration Agreement-California Department of Fish and Game.

Roseville Energy Park (03-AFC-1)

Data Requests

DATA REQUEST

16. Provide a copy of the Section 404 permit application submitted to the USACE. Provide the name and telephone number of the person assigned as lead for the project. Also indicate status of the USACE verification of the REP wetland delineation.
17. Indicate the status of consultations with the California Department of Fish and Game. Provide the date contact was initiated and the name and telephone number of the individual appointed as lead for the project.
18. Provide the name and telephone number of the individual USFWS appointed as lead for the proposed REP project. Provide the date consultation was initiated. Also indicate the status of the Biological Assessment needed for the proposed REP.
19. Indicate the status of consultations with the National Marine Fisheries Service. Provide the date contact was initiated, and the name and telephone number of the person assigned as lead for the project.
20. Indicate the status of consultations with the Regional Water Quality Control Board. Provide the date contact was initiated, and the name and telephone number of the person assigned as lead for the project.

BACKGROUND

California Natural Diversity Database records indicate some Swainson's hawks have nested successfully in the Pleasant Grove Creek riparian corridor, including one record approximately two miles from the proposed project site. To mitigate impacts to Swainson's hawk foraging habitat, CDFG specifies habitat compensation at a ratio of .75 to 1 (0.75 acre for every 1.0 acre adversely affected). This ratio is specifically for projects located within 5 miles of an active nest tree but greater than 1-mile from the nest tree.

RE provided conflicting information concerning Swainson's hawks observed while conducting surveys for the proposed project. In assessing habitat suitability for Swainson's hawks in the proposed project area, RE states (AFC, Biological Resources, page 8.2-15), Swainson's hawks were "observed during surveys for the REP in 2003 and for a previous project at the REP site (URS 2001)." However, while discussing wildlife surveys conducted for the proposed REP (AFC, Biological Resources), it is stated on page 8.2-18, that "although suitable habitat for special-status raptors such as burrowing owls and Swainson's hawk was noted, no evidence of these species was detected during the summer 2003 surveys." After reviewing the survey information submitted in the AFC, staff concluded that wildlife surveys were conducted for the proposed REP only during summer 2003.

Roseville Energy Park (03-AFC-1)

Data Requests

DATA REQUEST

21. Indicate if Swainson's hawks were observed during summer 2003 surveys, conducted by Tetra Tech (for RE), on the proposed project site and/or surrounding areas.
22. Describe the protocol level survey used for Swainson's hawks during the summer 2003 surveys conducted by Tetra Tech.
23. Indicate if wildlife surveys (other than the summer 2003 wildlife surveys) were conducted for the proposed REP.

BACKGROUND

RE indicated that REP sensitive plant surveys were conducted during June and July 2003. Some sensitive plants with potential to occur on or near the proposed project site have bloom times in March-May and some into August and October. Consequently, surveys for some sensitive plants were not conducted when plants could be identified. The last sensitive plant surveys conducted for the proposed REP site were conducted by URS during April and May of 2001. Existing habitats on the proposed site are suitable to support a variety of sensitive plant species including Big-Scale Balsamroot, Dwarf downingia, Fragrant fritillary, Bogg's lake hedge hyssop, Ahart's dwarf rush, Legenere, Pincushion navarretia, Sacramento Orcutt grass, and Sanfords arrowhead.

Various factors affect plant distribution and abundance. Some of these factors include weather and natural/anthropogenic disturbances. Native plants (including sensitive species) are sometimes discovered in areas where they were thought to be extirpated, where habitat is considered marginal to support a particular species, or in areas where the species were absent during the previous growing season. Because of the number of historical records that exist for sensitive plant species in the proposed project area, and because suitable sensitive plant habitat exists on and around the proposed project site, spring surveys are needed to determine status of sensitive plants on the proposed site.

DATA REQUEST

24. Indicate when sensitive plant surveys for the proposed REP will be conducted and what the target species will be. Include a phenology table for the target species.

BACKGROUND

RE proposed the use of a stormwater pond at the REP. Stormwater ponds can attract various bird species seeking water for feeding or roosting.

DATA REQUEST

25. Provide an analysis of the potential risk to birds, attracted to the project's proposed stormwater pond, from collision with project infrastructure. Include in the analysis a discussion of the potential for bird electrocution associated with the project's transmission/distribution lines.

Roseville Energy Park (03-AFC-1)
Data Requests

BACKGROUND

RE refers to training of construction workers (AFC, pg. 8.2-26) and training for construction monitors (AFC, pg. 8.2-29).

DATA REQUEST

26. Provide a discussion of the training for construction workers and monitors. Include a detailed description of what the training would consist of, personnel required to undergo the training, and the how the training would be administered.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Cultural Resources

Author: Gary Reinoehl and Al Schwitalla

BACKGROUND

Section 8.3 contains a USGS quad map (Figure 8.3-1) marked with various tracts that have been previously surveyed for cultural resources within the project area. The report (8.3-9) and quad map both reference a Tetra Tech FW Inc., 2003 survey that took place, however no individual report of this survey has been provided. Furthermore, the author mentions (8.3-9) that this Natural Gas Pipeline Alternative route was surveyed, but fails to provide adequate reporting by someone who meets the Secretary of Interior's Standards.

DATA REQUEST

27. Please provide a technical report documenting an archaeological survey authored by someone who meets the Secretary of Interior's Professional Standards. The report should address the Natural Gas Pipeline Alternative survey covered by Tetra Tech FW Inc. in 2003.

BACKGROUND

Section 8.3.13 contains a discussion of the methods used to initiate Native American Consultation. Appendix 8.3-B contains correspondence between the author and the Native American Heritage Commission (NAHC). The NAHC provided the author with a list of Native American contacts in the area. Letters were sent to all the individuals and groups on the list provided by the NAHC. The letter from the NAHC states, "If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received." No summary was provided of responses or lack of responses received from Native Americans notified and the results of the requested telephone calls.

DATA REQUEST

28. Please provide a summary of any response or lack of response that may have taken place as a result of notification.
29. If responses were not received by October 30, 2003, please provide telephone logs of the NAHC requested follow-up telephone calls that provides evidence that the materials were received and evidence of other efforts to further the consultation.

BACKGROUND

The archaeological sensitivity or potential sensitivity of a geographic locality is a function of local history and environmental factors. The location and type of prehistoric cultural resources typically demonstrate a response to a number of environmental factors that include topography, proximity of necessary and desirable resources,

Roseville Energy Park (03-AFC-1)

Data Requests

including water, food resources, and technologically important materials, and proximity of other cultural sites.

DATA REQUEST

30. Please thoroughly evaluate the potential for undetected, buried or near surface prehistoric archaeological resources within three miles of the project including linears. Note the proximity of Pleasant Grove Creek to the project, as well as known prehistoric resources such as archeological site CA-PLA-137B.

BACKGROUND

The archaeological sensitivity or potential of a geographic locality is a function of local history and environmental factors. Agricultural use often results in surface and subsurface archaeological deposits related to ranch household disposal patterns and other uses.

DATA REQUEST

31. Please provide a discussion of the historical importance of the Fiddymment Ranch and other historic ranches within three miles of the project site as it pertains to the development of agriculture and ranching in the area.
32. Please thoroughly evaluate the potential for undetected, buried or near surface historic archaeological resources within one mile of the project, including linears.

BACKGROUND

The Electrical Transmission Section of the AFC indicates that a 60 kV transmission line with 65 foot towers would follow Phillip Road to the west and the south of the Fiddymment homestead and main ranch complex (CA-Sac-970). PAR Environmental, Inc. found the ranch to meet the eligibility criteria for the National Register of Historic Places and the California Register of Historical Resources (CRHR).

DATA REQUEST

33. Please provide a discussion of the change in integrity of the setting, feeling and association of the Fiddymment homestead and main ranch complex completed by an individual that meets the Secretary of Interior's Professional Standards for this resource type. Since the Fiddymment property is adjacent to the proposed project site, discuss whether the change in the setting, feeling and association would materially impair the eligibility of the resource to the CRHR.

BACKGROUND

At times, local historical and archaeological societies have knowledge of cultural resources in an area of a project that may not be available through normal record sources. Identification of cultural resources in an area may indicate a potential for undiscovered resources at the project location.

Roseville Energy Park (03-AFC-1)
Data Requests

DATA REQUEST

34. Please contact local historical and archaeological societies that might have knowledge of historical or archaeological resources within one mile of the project. Please provide copies of the inquiry letters and any responses.
35. If any such resources are identified that could be impacted by the project or could have their immediate surroundings altered (change in the integrity of the setting) by this project in such a manner that the significance of the historical resource would be materially impaired and it has not been recorded on a Department of Parks and Recreation (DPR) 523 form, then please record the cultural resources on the DPR 523 form and provide a copy of the form.
36. If any of the resources could be impacted by the project or could have their immediate surroundings altered (change in the integrity of setting) by this project in such a manner that the significance of the historical resource would be materially impaired, please provide a discussion of the significance of the resources under CEQA Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the significance.

BACKGROUND

Cultural resources that are on lists created by local jurisdictions that could qualify as historical resources and could be impacted by the project need to be considered in the analysis. Staff needs the following information to complete the analysis.

DATA REQUEST

37. Please provide copies of local lists of important cultural or historic resources within one mile of the project site and linears that are designated by a local ordinance by the City of Roseville and by Placer County.
38. If any of these resources could be impacted by the project or could have their immediate surroundings altered (change in the integrity of setting) by this project in such a manner that the significance of the historical resource would be materially impaired, then please provide the following:
 - a. A copy of the requirements used by the local jurisdictions to qualify for the listing.
 - b. If the cultural resource(s) has not been recorded on a DPR 523 form, then please record the cultural resource on the DPR 523 form and provide a copy of the form.
 - c. Please provide a discussion of the significance of the resource(s) under CEQA Section 15064.5, (a), (3), (A)(B)(C) & (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding significance.

Roseville Energy Park (03-AFC-1)
Data Requests

Technical Area: Efficiency

Authors: Shahab Khoshmashrab

BACKGROUND

As designated in the AFC, the applicant states that PG&E has confirmed that its system has adequate natural gas capacity to supply the REP (REP 2003a, AFC § 2.2.18.3).

DATA REQUEST

39. Please provide documentation from PG&E confirming its ability and readiness to supply adequate quantities of natural gas to the REP for the life of the project.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Hazardous Materials Management

Authors: Geoff Lesh and Rick Tyler

BACKGROUND

The AFC includes the proposed on-site above-ground storage of approximately 10,000 gallons of aqueous ammonia. Section 8.5.2.2 of the AFC describes the aqueous ammonia concentration that is planned for use. Also included in this section is the modeling protocol planned for the Off-Site Consequence Analysis (OCA) of a potential accidental ammonia spill. Although the AFC states that the OCA will be performed during the Application for Certification process, it does not say when the results will be made available to staff.

DATA REQUEST

40. Please provide off-site consequence modeling results for a worst-case and an alternative-case loss-of-containment incident for aqueous ammonia. These should include exposure assessment for the worst-case upset condition that shows expected maximum downwind distance to concentrations listed in the AFC protocol, plus the LC10 (2000 ppm for 60 minutes), and IDLH (300 ppm for 30 minutes) concentrations under F-class stability conditions. Results should include details of any mitigation (e.g., secondary containment catchment basin, double-walled tank, etc.) for the storage tank, ammonia delivery-truck unloading pad, and the ammonia-transfer pumping package that are assumed in the OCA modeling.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Land Use

Author: David Flores

BACKGROUND

The California Department of Education (CDE) has School Siting Guidelines that address what it terms potentially hazardous facilities, which include some energy project features. CDE works with school district siting teams such as the schools staff from the Roseville area on application of these guidelines, and has recently begun working with the Energy Commission. Michael O'Neill is the Energy Commission's contact at CDE regarding proposed energy facilities. He can be reached at (916) 322-1461.

The Roseville Joint Union High School District, Center Joint Unified School District and Roseville City School District will serve forecasted school needs in this area. The West Roseville Specific Plan/Land Use Plan dated March 14, 2003, indicates that within the area of the proposed power plant, six schools (i.e., four elementary, a middle school, and a high school) are in the preliminary or conceptual planning phases by the school districts.

DATA REQUEST

41. The school proposals noted above are part of the development plans for the Signature Properties/Westpark Associates residential communities. To assess potential land use impacts, please provide any information as to recent discussions with the CDE and/or the Roseville area school districts associated with the placement of CDE -identified potentially hazardous facilities (e.g., natural gas line, on-site hazardous materials), within close proximity of the proposed schools.

BACKGROUND

The Land Use section (pages 8.6-10 – 8.6-11) says that power plants are conditionally permitted uses in the City's P/QP zoning district. However, because this is a City project, the City will not issue itself a Conditional Use Permit, but will follow an established process that mirrors the CUP process for a private sector project. The AFC says that the City intends to provide the Energy Commission with its proposed conditions of certification on the project so they may be incorporated into the Commission's permit. In addition, the Visual Resources section (page 8.13-18) of the AFC says that "The specific zoning requirements for any project are determined when the project is submitted for a Use Permit. Detailed requirements are determined by the Design Review Committee, or Planning Commission, on a case-by-case basis, upon approval of the Use Permit."

DATA REQUEST

42. Please discuss when Roseville Electric intends to submit the project to the appropriate reviewing entity (City Council, Planning Commission, or Design Review Committee), and whether the resulting City recommendations will be

Roseville Energy Park (03-AFC-1)

Data Requests

available so staff may consider them in either the Preliminary or Final Staff Assessments.

BACKGROUND

The AFC provided a parcel map describing the proposed project site as three individual legal parcels. To avert structure placement over established parcel lines, the applicant has indicated that a merger of parcels request will be filed with the City of Roseville to create one separate parcel. Energy Commission staff needs to know when the application will be filed with the City of Roseville.

DATA REQUEST

43. Please provide Roseville Electric's proposed schedule and the status of the application request before the City for the merger of parcels request to create one legal parcel.
44. Please provide the legal description for the newly created parcel and revised parcel map.

BACKGROUND

A review of Figure 2.2-1 (Site Layout) and the other portions of the project description in the application did not provide enough information to indicate how the proposed structures and project site would comply with local agency regulatory requirements. City of Roseville Zoning Code provisions require that there be landscaping and building setbacks, adequate street right-of-way and street improvements as necessary. Since the diagram (i.e., Figure 2.2-1) does not provide the above referenced regulatory information, it is difficult to ensure compliance with City standards.

DATA REQUEST

45. Revise Figure 2.2-1 Site Layout Map in the application to provide the:
 - a) location of all existing exterior lot lines with distances to existing and proposed structures;
 - b) location of the centerlines of Phillip Road, and Blue Oak Boulevard with distances to existing, exterior property lines;
 - c) location of existing and proposed curbs and gutters with distances to exterior property lines; and
 - d) locations with distances for any areas of building setback that will be landscaped.

BACKGROUND

The City of Roseville Sign Ordinance (Title 17) governs the size, location, and type of signs permitted on the project site. The AFC provides no indication of the signs proposed by the applicant. It is not possible to demonstrate compliance with the City Zoning ordinance from existing data submitted.

Roseville Energy Park (03-AFC-1)

Data Requests

DATA REQUEST

46. Provide details on the project's sign program that includes:
- a) the location, size and number of all signs proposed;
 - b) the materials that will be used to construct the signs;
 - c) the lighting technique that will be used for the signs;
 - d) the height of all proposed signs;
 - e) the type of signs to be used (e.g., a monument sign or a building mounted sign);
 - f) if signs will be located on buildings identify the distance from the surface of the sign to the surface of the structure to which it will be attached;
 - g) architectural renderings of all signs proposed; and
 - h) the content of each proposed sign.

BACKGROUND

The City of Roseville Zoning Code restricts lot coverage in the Public/Quasi-Public District that includes the project site. The site plan does not provide calculations of the site area and the areal extent of proposed roofed structures. This data is required to evaluate project compliance with zone lot coverage requirements.

DATA REQUEST

47. Provide calculations to show the project's consistency with the City of Roseville's Public/Quasi-Public District lot coverage standards with respect to:
- a) the areal extent of the project site (i.e., the entire extent of the ultimate legal parcel proposed for development) in square feet; and
 - b) the areal extent of proposed and existing structures with roofs, in square feet.

Roseville Energy Park (03-AFC-1)

Data Requests

Technical Area: Noise

Authors: Kevin Robinson, Shahab Khoshmashrab and Steve Baker

BACKGROUND

The WRSP design guidelines include measures to control noise and protect noise-sensitive land uses. These include the construction of a 6-foot-high masonry sound wall along the western boundary of the Pleasant Grove Waste Water Treatment Plant (PGWWTP) (REP 2003a, AFC § 8.7.2.3; City of Roseville 2003a, Figure 12-30). This sound wall would extend northward, west of the REP site, to Blue Oaks Boulevard. A sound wall will also be constructed between the nearest residential use to the REP, a high-density residential zone southwest of the project, and West Side Drive. The WRSP design guidelines also call for a sound wall on the southern boundary of the nearest residential area to the northeast, a low-density residential area located on future Hayden Parkway. This wall would help to block sound from the REP.

DATA REQUEST

48. Please model and summarize the plant noise levels at the nearest proposed new residential developments to the West, Northeast, and East of the REP site. If the modeling incorporates the above proposed sound walls, please provide documentation verifying the planned construction of these sound walls and define whether the construction of these sound walls is considered part of the REP project or part of another project by the City of Roseville.

BACKGROUND

An estimated future average ambient noise level of approximately 58 dBA was given in the AFC for the WRSP area (REP 2003a, AFC § 8.7.2.3).

DATA REQUEST

49. Please identify the standard descriptor pertaining to this measurement (L_{eq} , L_{90} , L_{dn} , ...).

BACKGROUND

As described in the AFC, the WRSP includes future developments within close proximity to the REP (REP 2003a, AFC § 1.1, Figure 8.6-5). Under this plan, the nearest school site planned would be 0.4 miles southwest of the project site (REP 2003a, AFC § 8.6.1.2).

DATA REQUEST

50. Please identify the locations of the nearest planned churches, hospitals, libraries, nursing homes and other schools included in the WRSP plan, if any, and their distances to the REP site.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Socioeconomics

Author: Joe Diamond

BACKGROUND

Providing the number of workers to be employed by craft during construction and operation helps staff assess if there are any socioeconomic impacts. It also can be part of an economic impact assessment.

DATA REQUEST

51. Please confirm whether the current workforce estimates in the AFC include construction activities for transmission, water and gas lines. If not, please provide workforce estimates for the transmission, water, and gas lines by craft employment on a monthly basis.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Soil and Water Resources

Author: Richard Latteri

BACKGROUND

The City of Roseville (City) will provide the industrial process water supply for the Roseville Energy Park (REP) from the Pleasant Grove Waste Water Treatment Plant (PGWWTP). The PGWWTP will supply tertiary-treated, recycled water to meet cooling and other process makeup, landscape irrigation, and fire fighting requirements. Section 8.15.1.4 of the AFC states that the PGWWTP will begin operation in late 2003. The PGWWTP is the only source of process water for the REP (Section 8.15.2.2).

DATA REQUEST

52. Please provide a schedule for the completion, testing, and EPA licensing of the PGWWTP and its expected commercial operation date.
53. Please provide in tabular format a summary of all existing and expected customers of PGWWTP recycled water, quantifying average and peak (if available) recycled water demand in acre-feet and the expected duration of each recycled water service agreement in years.
54. Does the REP propose to shut down in the event of a PGWWTP outage longer than the capacity of the on-site storage tank (1 million gallons)? Will there be a back-up water supply and how much of the on-site storage tank capacity is dedicated to fire fighting requirements? Please provide a discussion or contingency plan for plant operation in the event of a disruption of recycled water from the PGWWTP.

BACKGROUND

Construction of the REP may induce water and wind erosion at the power plant site. Surface water runoff is to be directed around the construction site to minimize erosion and pollutant loading. A National Pollution Discharge Elimination System (NPDES) permit for stormwater runoff from construction activities is required.

To evaluate the potential impacts from stormwater runoff, it is necessary to calculate the volume of run on/runoff from the REP site and associated areas (laydown/staging areas, parking area, and linear facilities). In order to evaluate the potential impacts related to stormwater and erosion/sedimentation, staff requests draft Storm Water Pollution Prevention Plans (SWPPP) for construction activities as early as possible in the AFC process. Stormwater and erosion/sediment control plans are components of the SWPPP. These plans are crucial to evaluate impacts related to REP stormwater quantity and quality. An Industrial Activity SWPPP will be needed prior to REP operation.

Roseville Energy Park (03-AFC-1)

Data Requests

DATA REQUEST

55. Provide a draft Storm Water Pollution Prevention Plan per the requirements of the General Permit to discharge stormwater associated with construction activities for the REP, the laydown area, and for the preferred alternatives for the linear facilities (transmission line and gas pipeline) that includes the following:
- a) Colored map drawings at 1"=100' or less that depict existing and proposed topography (contours) with labeled elevation numbers, arrows showing run on and runoff, structures, drainage facility locations, staging areas, and both on- and off-site soil stockpile areas on the drawings;
 - b) Best Management Practices (BMP) and a construction sequence on the drawings. Please provide in the narrative the full title and date of the BMP handbook used for BMP selection;
 - c) A complete mapping symbols legend on the drawings;
 - d) On-site stormwater calculations in the narrative;
 - e) Provide supporting data regarding the routing of on- and off-site runoff volume and flow rate for the 10-year and 100-year, 24-hour storm events;
 - f) Address procedures that will be used to handle potential construction runoff impacts;
 - g) Monitoring and sampling protocols for erosion, stormwater runoff control and stabilization procedures; and
 - h) Narrative text that describes the project, stormwater pollution and erosion control BMPs, as well as those controls that meet the general standards of Placer County Flood Control and Water Conservation District "Stormwater Management Manual", the City of Roseville's Municipal Storm Water Management Plan and the Department of Public Works – "Improvement Standards."

BACKGROUND

AFC Section 8.15.5.3 and Table 8.15-8 identify a number of City permits that will be required prior to the construction and/or operation of the REP.

DATA REQUEST

56. Please provide all information required by the City of Roseville for:
- a) a Municipal Industrial Wastewater Discharge Permit;
 - b) a Recycle Water Permit; and
 - c) a Grading Permit.

Roseville Energy Park (03-AFC-1)
Data Requests

BACKGROUND

During operation, the REP will store hazardous materials in such quantities that a Spill Prevention, Control and Countermeasure Plan (SPCC) will be required. The regulations allow combining these into a common document if desired.

DATA REQUEST

57. Please provide a draft SPCC Plan for the REP.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Transmission System Engineering

Author: Laiping Ng

Technical Senior: Albert McCuen

BACKGROUND

The Application for Certification (AFC) indicated that a Detailed Facilities Study (DFS) is being performed by Western and was scheduled for completion in late 2003.

DATA REQUEST

58. Please provide a Detailed Facility Study for the selected 60 kV connection option. Analyze the system impact, including scenarios both with and without the West Roseville Specific Plan (WRSP) and with and without the proposed project during peak and off peak system conditions which will demonstrate conformance or non-conformance with the reliability and planning criteria with the following provisions:
- a. Identify major assumptions in the base cases including imports to the system, major generation and load changes in the system and queue generation.
 - b. Analyze the system for N-0, important N-1 and critical N-2 contingency conditions and provide a list of criteria violations in a table showing the loadings before and after adding the new generation.
 - c. Short circuit studies. Identify all equipment analyzed, interrupting current, current interrupting rating, and required interrupting rating due to the project.
 - d. Analyze the system for Transient Stability and Post-transient voltage conditions under critical N-1 and N-2 contingencies, and provide related plots, switching data and a list of voltage violations in the study.
 - e. Identify the reliability and planning criteria utilized to determine the criteria violations.
 - f. Provide a list of contingencies evaluated for each study.
 - g. Provide power flow diagrams (MW, percent loading & per unit voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations appear.
 - h. List the mitigation measures considered and those **selected** for all criteria violations.
 - i. Provide electronic copies of *.sav and *.drw Positive Sequence Load Flow files.

BACKGROUND

The System Impact Study provided in Appendix 6-A did not contain complete information necessary to evaluate system reliability.

Roseville Energy Park (03-AFC-1)
Data Requests

DATA REQUEST

59. Please provide a one-line diagram for the 60 kV connection of the proposed project including the configuration without the WRSP.
60. Please provide the conductor size for the outlet circuits which connect the proposed project to the transmission system.
61. Please clarify the information on page 18 of the Supplement in Response to Data Adequacy Comments. The table shows percent loading with and without the proposed project for both 2006 and 2010. Is the WRSP included in these studies?
62. What are the T121 operating procedures identified to mitigate criteria violations on page 18 of the data adequacy supplement? Please provide a copy of the T121 operating procedure.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Visual Resources

Author: Eric Knight

BACKGROUND

The AFC states that although the REP is not located within the West Roseville Specific Plan (WSRP) area, the frontages of the future realigned Phillip Road and future Blue Oaks Boulevard are included in the WRSP. As such, adjacent development should follow the WRSP design standards that call for a 25-foot wide landscape easement along the west side of Phillip Road (east of the REP) and a 50-foot wide easement along the south side of the extended Blue Oaks Boulevard (north of the REP). The AFC further states that the landscaping that REP will be responsible for installing along Phillip Road will “significantly reduce the visual impact of the project as seen from residents to the east” (Page, 8.13-16; Section 8.13.4, Mitigation Measures). When it is installed as part of the build-out of the WRSP, landscaping along the south side of Blue Oaks Boulevard is identified as screening the view of the power plant from the residence (4900 Phillip Road) located north of the REP site.

DATA REQUEST

63. Community Design Guidelines. The plan shall identify the tree and shrub species, as well as any other measures (e.g. berms, masonry walls, etc.), that are being proposed to screen the power plant. Please include a table on the plan that identifies for each species proposed the numbers of plants to be used, their sizes when planted (container size and height), their growth rates (feet per year), and their maximum height and spread.
64. Please indicate a timeframe for when the landscaping for the REP will be installed.

BACKGROUND

There is a discussion in the subsection titled “Architectural Design” about the proposed design and color treatments for the project. The administration/control building, warehouse/maintenance building, and water treatment buildings are proposed to have “off-white colored walls.” According to the AFC, the plant electrical and cooling tower chemical feed buildings are proposed to be this same color. The “off-white” color may be too light and could cause offsite glare impacts. In addition, it has been staff’s experience that the brine concentrators, crystallizers, HRSG piping and drums, and in some cases the HRSG stacks, are covered with aluminum lagging for insulation purposes. The aluminum lagging can be a source of daytime glare. Staff typically proposes a condition of certification requiring that the surfaces of the project structures and buildings not create excessive glare.

DATA REQUEST

65. Please discuss whether the color of the aforementioned buildings can be determined later during compliance. If the construction timeframe of the project

Roseville Energy Park (03-AFC-1)

Data Requests

will require the color to be selected earlier, please propose an alternative color for these buildings that would not be as light and reduce the likelihood of offsite glare.

66. Please discuss design measures that can be incorporated into the project that will reduce the amount of sunlight being reflected off any aluminum lagging. Please also discuss the types of finishes that will be applied to the other major structures, equipment, and buildings to ensure that the project does not create excessive glare.

BACKGROUND

Construction laydown and worker parking areas will be located to the north, northwest, and northeast of the power plant. Figure 2.2-2 shows temporary fencing around the laydown and parking areas. Construction equipment, materials, and personnel vehicles will be visible from two rural residential properties located north of the REP. The temporary visual impacts of the laydown and worker parking areas are not considered significant, so no mitigation is proposed in the AFC. Other power plant developers have agreed to install temporary screening during construction as a “good neighbor” to adjacent residential properties.

DATA REQUEST

67. Please discuss whether Roseville Electric also would install temporary screening material (slats or industrial fabric mesh) on the fencing surrounding the construction laydown/parking areas to reduce the visibility of materials, equipment, and vehicles from the adjacent residential properties.

Roseville Energy Park (03-AFC-1) Data Requests

Technical Area: Visual Resources - Plume

Author: William Walters

BACKGROUND

Staff plans to perform a plume modeling analysis for the cooling tower. Staff requires additional cooling tower operating information to complete this analysis.

DATA REQUEST

68. Staff will model the cooling tower plumes using the data provided in the 8.1 Appendices of the AFC. Staff often recommends, for projects with unabated wet cooling towers, that the exhaust flow rate/heat rejection rate ratio that was modeled be used as a basis for a cooling tower design condition of certification. Please indicate if additional design safety factors for the exhaust flow rate and/or heat rejection rate should be considered for this project's cooling tower modeling analysis.
69. The data provided in Appendix 8.1B of the AFC states that under baseload, one or two cooling tower cells will be shut down under the "Cold" operating case depending on the turbine configuration. However, with the information provided, staff cannot determine at what point between 62°F and 34°F the cell(s) will be shut down. Please indicate the estimated ambient condition when the cooling tower cell(s) will be shut down for each turbine configuration.

Roseville Energy Park (03-AFC-1)

Data Requests

Technical Area: Waste Management

Author: Ellen Townsend-Hough

BACKGROUND

The Department of Toxic Substances Control (DTSC) indicates a Phase I Environmental Site Assessment (ESA) for entire length of the natural gas pipeline alignment is required.

The following types of businesses warrant investigation if they are located on, adjacent, or in proximity to the proposed pipeline route. Proximity is defined as within a path of migration from these businesses until migration is considered blocked or highly unlikely.

- Automobile dealerships, maintenance /repair, and storage and salvage lots.
- Golf courses (fertilizers and pesticides).
- Machine /equipment /appliance servicing operations.
- Commercial printing operations.
- Oil distribution facilities.
- Any industry engaged in the storage /transport /disposal of hazardous waste or the use of hazardous materials.

DATA REQUEST

70. Please provide a Phase I ESA for the 6 mile 10 -16-inch diameter underground natural gas pipeline corridor which, according to ASTM 2000 guidelines, contains a statement of conclusions and a recommendation of either no further action or for Phase II ESA sampling and analysis and the reasons which support the recommendation and includes:
 - a) Property where contamination is known, or suspected at an up-gradient or adjoining site.
 - b) Property which is, or has been used for industrial/manufacturing purposes. Adjoining property with this type of usage should also be included in the investigation.
 - c) Property for which any prior environmental investigation indicated the potential for contamination.
 - d) Property displaying evidence of hazardous waste storage on site, whether permitted or not. For example, the existence of a former dry cleaner or gas station which utilized underground or above ground storage tanks. Agricultural properties, where pesticides were stored/mixed and potentially released, should also be investigated.

Roseville Energy Park (03-AFC-1)
Data Requests

- e) Property with visible staining.
 - f) Property where contaminants exceeding drinking water standards have been detected.
 - g) Property where state / federal agency notices of violation have been issued.
 - h) Property on which equipment containing PCBs was stored.
 - i) Property where fill dirt has been brought that has, or may have originated from a contaminated site.
 - j) Property with known or suspected discharges of wastewater (other than storm-water and sanitary waste) into a storm water drain.
 - k) Property with an environmental lien on it (imposed either by CERCLA 42USC / 9607(1) or similar state and local laws).
 - l) Property along existing or past railroad tracks.
71. For agricultural areas, please provide a representative sample (at least 10 percent) of all parcels randomly selected for a Determination of Pesticide Use assessment. The assessment shall identify the type of crops grown over as long a period as records indicate, the historical use and identity of pesticides (including organic and inorganic pesticides as well as herbicides), and a statement of the likelihood of finding along the pipeline route levels of pesticides which might present a risk to pipeline workers and/or the public.